

PACKET SWITCH, SCHEDULING DEVICE, DROP CONTROL CIRCUIT,  
MULTICAST CONTROL CIRCUIT AND QOS CONTROL DEVICE

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ABSTRACT OF THE DISCLOSURE

10 To achieve QoS control, drop control and multicast  
control of a variable-length packet at high speed in  
small scale hardware, a packet divider divides a  
variable-length packet into fixed-length packets, and an  
input buffer section stores the divided fixed-length  
15 packets into queues by output lines and by QoS classes.  
A large number of QoS classes are mapped into only two  
kinds of classes including a guaranteed bandwidth class  
for which an assigned bandwidth is guaranteed and a best  
effort class for which a surplus bandwidth is allocated,  
thereby to achieve scheduling at the input side by an  
20 inter-line scheduler. An output buffer section assembles  
a variable-length packet from fixed-length packets that  
have been obtained by switching at a switch section in an  
output buffer section. A QoS control is performed based  
on a packet length.

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